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| 09/832,873  | 04/12/2001 Almut Kriebel 7590 10/01/2003 |     | Almut Kriebel        | P20635.P06          | 1382             |
| 7055  |  |     | EXAMINER             |                     |                  |
| GREENBLUM & BERNSTEIN, P.L.C.<br>1950 ROLAND CLARKE PLACE |  |     |                      | ALVO, MARC S        |                  |
| RESTON, V   |  | CE  |                      | ART UNIT            | PAPER NUMBER     |
| ,   | •  |     |                      | 1731                |                  |

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 13

Application Number: 09/832,873 Filing Date: April 12, 2001 Appellant(s): KRIEBEL

Neil F. Greenblum
For Appellant

MAILED
SEP 3 0 2003
GROUP 1700

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 20, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

# (3) Status of claims.

The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final.

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### (5) Summary of invention.

The summary of invention contained in the brief is correct.

#### (6) Issues.

The appellant's statement of the issues in the brief is correct, except the 35 USC 112 rejections have been dropped as Appellant states that the term "mallet rolls" as used in the claims, are structurally similar to what are conventionally referred to as "hammer rolls", and the "mallet" *per se* would not necessary differ from the "hammer". Accordingly, the term "mallet rolls" in the claims is equivalent to "hammer rolls" and is no longer considered indefinite.

# (7) Grouping of claims.

Appellant's brief includes a statement that claims 1-16 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

#### (8) Claims appealed.

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (9) Prior Art of record.

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

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### **REFERENCES**

### **U.S Patents**

| 6,045,070  | DAVENPORT       | 4-2000  |
|------------|-----------------|---------|
|            | Foreign Patents |         |
| 96/18769   | wo              | 06-1996 |
| 197 12 653 | DE              | 10-1998 |
| 2,364,289  | FR              | 04-1978 |
| 1,239,047  | FR              | 07-1960 |

It is noted that U.S. 6,250,573 is the foreign equivalent of DE 197 12 653 and has been relied on as an equivalent translation.

Enclosed are translations of French Patents 1,239,047 and 2,364,289.

# (10) New prior art.

No new prior art has been applied in this examiner's answer.

# (11) Grounds of rejection.

Claims 1, 5-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 with or without FR 2, 364,289.

WO 96/18769 (Figure 3) teaches delivering an aqueous fibrous stock (19), pressing out water in dewaterer (18) to form a highly consistent high consistency stock, introducing the stock in predisperser/grinder (1) to loosen and distribute the stock, transporting the stock from the predisperser (1, 2) to a second disperser/grinder (8, 9) by screw feeder (7). FR 1,239,047 teaches the alternativeness of using a mallet (hammer) roll (Figure 1) and a disk disperser/grinder

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(Figures 2 and 3) for dispersing paper stock and to mix bleaching chemicals into the pulp. It would have been obvious to the routineer to substitute the mallet roller disperser/grinder of FR 1,239,047 for the disk disperser/grinder of WO 96/18769 as they perform the same function of pre-dispersing and shredding (pulping) the paper stock and mixing bleach chemicals into the pulp. It would have been obvious to the routineer to substitute the mallet roller disperser/grinder of FR 1,239,047 for one or both of the disk dispersers/grinders of WO 96/18769 as FR 1,239,047 teaches the alternativeness of using disc or mallet dispersers. The claims read on two mallet roll dispersers in sequence wherein the first would break up the fibrous material before feeding the material to the second mallet disperser. Or FR 2,364,289 teaches that a mallet roller (14) could be placed prior to a disperser to break up the stock material. It would have been obvious to the routineer to use the "mallet roller" of FR 1,239,047, having fixed peripheral impact sections, to break up the stock material of WO 96/18769, prior to the disperser of WO 96/18769, as taught by FR 2,364,289. See WO 96/18769, page 2, lines 25-26 for adding steam centrally into the second disperser, Figure 3, (17). Claim 7 is rejected, as the axis through which the mallets, of FR 1,239,047, rotate would be perpendicular to the transport direction. Claim 13 is rejected as WO 96/18769 introduces the material centrally into the dispersing machine using a screw conveyer; see Fig. 1, (9). It would have been especially obvious to add the steam directly to the dispersing zone of WO 96/18769, as such is taught by FR 1,239,047, see Figures 1 and 3.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 with or without FR 2, 364,289 as applied to claim1 above, and further in view of German 197 12 653 (see U.S. 6,250,573 for translation).

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WO 96/18769 does not give any specifics as to the disc disperser (7,8). As evidenced by German 197 12 653, such dispersers conventionally have several lines of teeth on the surface of the discs to help disperse the paper stock. It would have been obvious to the artisan that the teeth of German 197 12 653 could be used on the disks of WO 96/18769 to better disperse the paper stock. It would have been especially obvious to substitute the disperser of German 197 12 653 for the disperser of WO 96/18769 as they both are used to heat (with steam supplied to the middle of the disperser) and disperse paper stock.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 with or without FR 2, 364,289 as applied to claim1 above, and further in view of DAVENPORT with or without German 197 12 653.

DAVENPORT teaches, col. 14, line 5 to column 15, line 14, using a mallet roller (Figure 8 (62)) to predisperse and shred paper stock to pieces less than 6 inches (152 mm) prior to a disk disperser and teaches that the mallet roller reduces the energy needed to disperse the paper stock. It would have been obvious to use the speed necessary to obtain the desired degree of dispersing and paper size. If necessary, German 197 12 653 teaches using a paper length of 5 to 30 mm, see claims 5 and 6, a rotation speed of 10-30 sec. for the disc disperser, see claim 13. It would have been obvious to use a slower speed of rotation for the predisperser of DAVENPORT and/or WO 96/18769 as DAVENPORT teaches that the mallet roller saves energy over other predispersing machines.

# (12) New ground of rejection.

This Examiner's Answer does not contain any new ground of rejection.

### (13) Response to argument.

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Appellant argues that WO 96/18769 uses a is grinding a particulate material. However, WO 96/18769 clearly discloses using two dispersers (1) and (8) to disperse chemicals into wood pulp. See page 3, lines 26-30, page 5, lines 1-6 and page 4, line 28, page 4, line 27 and page 1, lines 9-10.

The argument that it would not be obvious to substitute the mallet rolls of FR '047 or '289 for the "grinder" of WO 96/18769 is not convincing as:

- (1) WO 96/18769 discloses using a grinder to disperse the bleach chemicals and not only a grinder. This would be equivalent to the pulper of FR 1,239,047 which grinds the pulp and mixes bleaching chemicals and pulp to disperse the bleach chemicals into the pulp; and
- (2) FR '289 teaches using a mallet roll (14) prior to a disperser (2) to break up the stock material. This would function in the same manner as the disperser/grinder of WO 96/18769.

It is noted that the "impact surfaces" have not been defined and can read on then sections of the walls that the particles of FR '289 strike. From the teachings of FR '289 it would have been obvious to use a mallet roll prior to one or both of dispersers of WO 96/18769 to break up the stock material prior to dispersing the material. Figures 1 and 2 of FR '047 teach using the same type of mallet roll as that claimed, e.g. having fixed peripheral impact sections. It would have been obvious to use the mallet roll of FR '047 prior to the disperser of WO 96/18769 as taught by FR '289.

It would have been especially obvious to substitute the disperser of FR '047 for the disperser of WO 96/18769 as both are being used to disperse bleach chemicals in to pulp, see WO 96/18769, page 2, lines 31-32. Using one type of disperser for another, e.g. a mallet-type for a disk-type, would have been prima facie obvious to the routineer.

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Appellant has further argued that FR '047 is a kneader and not a grinder as taught by WO

96/18769. The translation refers to a grinder and not to a kneader. The purpose of the

kneader/disperser of FR '047 is the same as WO 96/18769, e.g. they both are used to disperse

chemicals, such as bleach chemicals in to pulp. It would have been obvious to substitute the

"kneader/disperser or grinder/disperser of FR '047 for the "grinder/disperser of WO 96/1876 they

perform the same function of dispersing bleach chemicals into paper pulp.

Appellants do not present any specific arguments as to how the limitations set forth in the

dependent claims are separately patentable over the cited prior art. Appellant merely recites the

language of each dependent claim and states the art does not teach or suggest the combination for

each dependent claim. In the absence of substantive arguments explaining why the specific

limitations in the rejected claims render the claims separately patentable over the applied art, the

rejections of these dependent claims should be affirmed. See 37 CFR § 1.192 (c)(6)(iv)(1993).

For the above reasons, it is believed that the rejections should be sustained.

**Primary Examiner** 

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msa

August 30, 2003

Conferees:

Mike Ball &

Steve Griffin Jan Mi-